



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspio.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/643,993	08/23/2000	Magnus Oberg	2466-69	3192	
7	590 11/06/2002				
NIXON &VANDERHYE P.C. 8th Floor 1100 North Glebe Road			EXAMINER		
			TRAN, DZUNG D		
Arlington, VA	22201-4/14		ART UNIT PAPER NUMBER		
			2633		
			DATE MAILED: 11/06/2002	DATE MAILED: 11/06/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

			<u>,</u>			
		Application No.	Applicant(s)			
	000 4 40 0	09/643,993	OBERG ET AL.			
Office Action Summary		Examiner	Art Unit			
		Dzung D Tran	2633			
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover sheet with the c	correspondence address			
THE - Exte after - If the - If NC - Failu - Any I	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin within the statutory minimum of thirty (30) day iill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed rs will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1)	Responsive to communication(s) filed on Ame	<u>endment flied on 08/13/2002</u> .				
2a)⊠	This action is FINAL . 2b) ☐ Thi	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims						
4) 🖂	Claim(s) 29-62 is/are pending in the applicatio	n.				
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[5)⊠ Claim(s) <u>29-32 and 46-49</u> is/are allowed.					
6)⊠	6)⊠ Claim(s) <u>33,40-45,50 and 57-62</u> is/are rejected.					
7) 🖂	7)⊠ Claim(s) <u>34-39 and 51-56</u> is/are objected to.					
8) Claim(s) are subject to restriction and/or election requirement. Application Papers						
9) 🗌	The specification is objected to by the Examiner	•				
10) 🔲	The drawing(s) filed on is/are: a)□ accep	ted or b)⊡ objected to by the Exa	miner.			
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).			
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority (under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
	1. Certified copies of the priority documents	s have been received.				
	2. Certified copies of the priority documents	s have been received in Applicati	on No			
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
14) 🗌 A	Acknowledgment is made of a claim for domestic	priority under 35 U.S.C. § 119(e	e) (to a provisional application).			
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachmen	t(s)					
2) Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	y (PTO-413) Paper No(s) Patent Application (PTO-152)			
S. Patent and Ti	rademark Office					

Application/Control Number: 09/643,993 Page 2

^ Art Unit: 2633

DETAILED ACTION

1. This office action is responsive to the amendment filed on August 13 2002.

Specification

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 33, 40, 50 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyauchi et al. U.S. patent no. 5,877,881.

Regarding claims 33 and 50, Horiuchi clearly discloses an optical WDM network comprising at least two nodes (figure 1, elements 1, 2) interconnected by a bi-directional optical link (figure 1, elements 7a, 7b, 7n, 7n+1 and 8a, 8b, ..8n, 8n+1), each node comprising at least two pairs of ordinary optical transmitters (figure 4, elements 101, 102) and ordinary optical receivers (figure 5, elements CH1, CH2), each pair including an ordinary optical transmitter and an ordinary optical receiver and a transmitter included E/O converter (figure 1, element 16) for receiving electrical signals and converting the receive electrical signals to optical signals and a receiver included O/E converter for receiving optical signals converting them to electrical signals.

Regarding claims 40 and 57, Horiuchi further discloses all the receiver connected to a single demultiplexer (figure 5, element 200).

Art Unit: 2633

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 41-45 and 58-62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horuichi et al. U.S. patent no. 5,790,294 view of Takehanna et al. U.S. patent no. 6,081,359.

As per claims above, Horiuchi discloses all the limitation except for a switch provided to conduct an optical from the demultiplexer to at most of the ordinary receivers, and the optical signals issued by a spare transponder. Takehana in figure 3 clearly disclose an optical WDM network having transmitting system and receiving system, ordinary transponders (figure 3, elements 2-1, 2-2, 2-3, 2-4), each ordinary transponder receiving the issue first optical signals from only one of the ordinary optical transmitters of the pair and converting the receive signals to issue the second optical signals of the well defined wavelength band (figure 3, elements λ_1 , λ_2 , λ_3 , λ_4) a first optical multiplexer (figure 3, element 8) connected to receive the second optical signal issued by the ordinary transponders of the node, the first optical multiplexer combining the second optical signals to issue a combined optical signal on an optical fiber. It would have been obvious to an artisan at the time of the invention was made to replace transmitting apparatus and receiving apparatus of Takehana with the transmitting

Application/Control Number: 09/643,993 Page 4

Art Unit: 2633

equipment and receiving equipment of Horiuchi in order to obtain a reliability optical system.

- 6. Claims 34-39 and 51-56 are objected to as being dependent upon the rejected base claims, but would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims.
- 7. Claims 29-32 and 46-49 are allowed.

Response to Arguments

8. Applicant's arguments with respect to claims 33-45 and 50-62 have been considered but are most in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Application/Control Number: 09/643,993

Art Unit: 2633

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- a. Sutter et al. U.S. patent no. 5,760,934. Ring network for transmitting wavelength multiplexed informations
- b. Mestdagh et al. U.S. patent no. 5,299,293. Protection arrangement for an optical transmitter/receiver device
- c. Harano U.S. patent no. 5,943,146. Optical transmission system
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung Tran whose telephone number is (703) 305-0932.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, Jason Chan, can be reached on (703) 305-4729.

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

LESLIE PASCAL PRIMARY EXAMINER